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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,394	11/03/2003	Tessei Shimizu	M1909.1124	2718

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EXAMINER
NGUYEN, THU V

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 May 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) <u>5-10</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-4</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>5/6/05</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

The amendment filed on May 6, 2005 has been entered. By this amendment, all claims 1-

10 are now pending in the application. Among the pending claims, non-elected claims 5-10 have

been withdrawn from consideration.

Claim Objections

1.   Claim 6 is objected to because of the following informalities:

In claim 6, line 5, the claimed "the vehicle a vehicle of the company" should be corrected

to "the vehicle *is* a vehicle of the company".

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claim 1-2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapolka et al

(US 6,714,857) in view of Riu et al (JP 2002-197155) (enclosed IDS) and Lightner et al (US

6,636,790).

As per claim 1, Kapolka teaches a driving diagnostic system comprising: a vehicle 105

(fig.1), a center 120 (fig.1), a user terminal 125 (fig.1), a network 125 (fig.1) and a radio

communication network 115 (fig.1). The vehicle includes a sensor (a compass) (col.9,lines 43-

47), and an in-vehicle device 218 (fig.2) in which the in-vehicle device acquires information

about the fuel consumption, speed, vehicle position and time (col.4,lines 59-67) and temporarily

processes the acquired data fro subsequent use (col.6, lines 39-46); the radio communication

terminal transmits the information to the center via radio communication network and receives

information from the center (col.5, lines 40-43); the center includes a communication control

device for transmitting and receiving the information to and from the radio communication

terminal in the vehicle (col.6, lines 47-49; col.4, lines 38-40), a management server for managing

the information transmitted from the vehicle, calculating fuel consumption with respect to each

event (idling, etc) (col.6, lines 49-63; col.7, lines 34-58) for a total driving time, storing the

calculated information (col.7, line 55); providing the content for advices to the user's terminal

via a web server (col.7, lines 55-58; col.4, lines 45-50); the user's terminal is a personal

computer 125 (fig.1) for displaying the contents information (col.4, lines 52-58). Kapolka does

not explicitly disclose that the in-vehicle device provides data concerning engine revolutions,

vehicle speeds; the management server provides environment-load emissions, stores the

calculated information in the database with user information, retrieves and process the

information for diagnosis by combining and comparing the information, provides the contents

from the mail server to the user terminal; and the user's terminal sets up timing of providing the

contents and detail of the contents and informs with sound. However, Riu teaches using engine

speed which is well known to be derived from the engine revolutions, vehicle speeds for

determining environment-load emission (abstract; para 0027, 0029), storing calculated

information with user information in a database (para 0020; 0036), retrieving and processing the

information and provides the content of the information via email server (para 0044), and

Lightner suggests using gathered data from the vehicle for diagnosis by combining and

comparing the data (col.3, lines 6-22, lines 34-50; col.4, lines 52-59; col.8, lines 56-67). Further,

setting up personal information, timing of providing the contents, and utilizing sound for alerting

the user would have been well known. It would have been obvious to a person of ordinary skill

in the art at the time the invention was made to include the method for determining environment-

load emission of Liu and the method for performing vehicle diagnosis of Lightner to system of

Kapolka in order to allow the user to track working condition of a specific vehicle and to monitor

the amount emission to facilitate limiting pollution to the environment.

As per claim 2, providing a display at the server center so that the operator at the server

can monitor general vehicle diagnosis condition would have well know.

As per claim 4, Riu teaches in fig.3 a terminal of a company which is required to reduce

fuel consumption (para 0042, 0050) and a center of a traffic 3 (fig.3). Further, Riu the capability

of providing suitable action based on the environment load emission (which is well known to

correspond to the amount of fuel consumption) (para 0045) and allowing the company to sell

surplus right of pollution (para 0051), moreover, reducing the fuel cost by reducing taxes, or by

the reimbursement of the selling of the surplus right of pollution would have been both known

and obvious design choice.

4.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kapolka et al (US

6,714,857) in view of Riu et al (JP 2002-197155) (enclosed IDS) and Lightner et al (US

6,636,790) and Satoshi et al (US 2002-089349) (enclosed IDS).

As per claim 3, refer to claim 1 above. Further, turning power source when a vehicle

start up, using wire line or short range wireless communication system such as Bluetooth

technology between the sensors and the in-vehicle device would have been well known vehicle

operation. Moreover, Satoshi teaches breaking down of fuel consumption with respect to each

event (stop event, sudden braking, sudden accelerating, etc), finding out an event causing

increases of fuel consumption, and advising a user to drive in a way to reduce fuel consumption

(para 0026-0027, 0094, 0096-0097, 0101-0102; 0023). Moreover, determining environment load

emissions from the amount of fuel consumption would have been both well known and obvious.

It would have been obvious to a person of ordinary skill in the art at the time the invention was

made to break down the fuel consumption (and hence break down environment load emissions)

of Kapolka in view of Riu and Lightner with respect to vehicle operation events as taught by

Satoshi in order to help the driver to improve driving operation to save fuel as motivated by

Satoshi in para 0023 and therefore to minimize pollution to the environment.

Response to Arguments

5.   the claim objection to the withdrawn claim 6 is maintained to remind the applicant to

correct the informality should claim 1 to which claim 6 depends on is allowed.

6.   Applicant's arguments filed May 6, 2005 have been fully considered but they are not

persuasive.

7.   In response to applicant's argument on pages 12-14, that there is no suggestion to

combine the references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention where

there is some teaching, suggestion, or motivation to do so found either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re*

Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21

USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for combining references is found in

the knowledge generally available to one of ordinary skill in the art. Kapolla teaches using

vehicle speed in determining driving diagnostic system, Riu teaches using engine speed in

determining the environmental load (para 0027, 0029), the engine speed is well known to be

derived from the engine revolutions, therefor using engine revolutions in the Kapola would have

been obvious in view of Riu's teaching, moreover, storing user's information and providing

information via mail server would have been obvious matter of selecting a communicating

method for communicating from a remote location to a local device when such the

communication is needed. In view of Lightner's teaching, diagnosing vehicle condition

including gathering data and comparing data would have been obvious in determining certain

vehicle condition by comparing data measured with the thresholds that indicates normal or

abnormal condition of the vehicle. Furthermore, with respect to claim 3, in view of Satoshi's

teaching, determining fuel consumption corresponding to each operation event such as stop

event, sudden braking, etc. would have been available as prior arts, when it is desired to suggest

the driver to avoid certain operation to save the fuel in the system or Kapolka, an ordinary person

skilled in the arts would be motivated to resort to Satoshi's teaching to determine fuel

consumption for each operation, and to provide advisory to the driver accordingly.

   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing
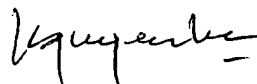
date of this final action.

   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The

examiner can normally be reached on T-F (7:30-6:00).

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 22, 2005

**THU V. NGUYEN
PRIMARY EXAMINER**